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*Small Fruits Indexed* *True Fruits Indexed*

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U.S. Department of Agriculture

ESTABLISHED 1870.

My Motto: American Trees for American Planters.

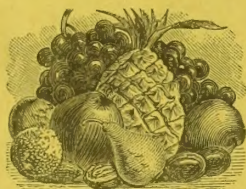
## DESCRIPTIVE CATALOGUE

—OF—

# FRUIT *and* ORNAMENTAL TREES

SMALL FRUITS, VINES,

Shrubs, Roses, Plants, Etc.



—GROWN AND FOR SALE BY—

C. L. WATROUS,  
CAPITAL CITY NURSERIES

DES MOINES, IOWA.

—  
GROUNDS ONE MILE SOUTH OF CITY LIMITS ON WINTERSET ROAD.  
—

DES MOINES:  
GEORGE A. MILLER, PRINTER,

1887

## Brief Hints to Customers.

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PLANTING, &c.—FIRST, TAKE CARE OF THE ROOTS—they are the life of the tree. Have plenty of wet straw in your wagon and cover everything well. Bury roots at once, and plant soon as possible. Second—choose good dry ground—a north or west exposure is best—and prepare thoroughly. Plant sixteen feet north and south (so top of each tree will soon shade trunk of tree north of it), and twenty-four feet east and west, or four to six feet further each way if preferred. Dig large and deep holes, and put in surface soil. If ground is flat, plant shallow and ridge towards trees each year in plowing; if high and exposed, plant six inches deeper than in nursery, for protection to roots; fill about roots with fresh soil till holes are three-fourths full, leaning trees a little southwest, put in half-bucket of water, fill hole and tramp lightly, add a little more soil, and then, *before leaving the job*, mulch with old straw or litter six inches deep and for three feet about each tree (and smaller things in proportion); then, with a sharp knife, reduce the top of fruit trees about half, cutting out entirely all weak shoots and shortening others to give the leader a good start. Then, at planting—first, *keep all roots moist and covered until under ground*; second, *use plenty of water*, and if any roots are covered with dry mud, *wash it off*; third, *mulch everything well*; fourth, reduce tops. Evergreens are *always in leaf*, and must therefore be handled with *extra care*. Handle and plant like other trees, except that the roots *must positively not be exposed to sun or air*. When done planting, pound the soil about the trees very hard (but not when the ground is wet and muddy), and mulch heavily. Don't water oftener than once a week in the driest weather, and then flood trees, and the soil, and mulch about them. Daily watering will kill them. Shade the first summer will be beneficial.

When trees are received in Fall, open all bundles, dip roots in thin mud, and bury in a pit in *dry soil*, with roots two feet deep and tops even with the surface; work soil well among roots, fill up and mound over top six inches deep. After the ground has frozen, put a little manure over the pit. Grapes and small fruit—except strawberries—are kept in the same way. In spring, raise trees early and heel in, covering tops with straw to prevent too sudden drying, and plant *when ground is warm*. If your trees and plants don't arrive in spring till ground is warm and buds are well started and broken, don't be frightened. *It is just the time*. Plant *carefully according to directions*, and you will be surprised at their quick and healthy growth.

Plant grape vines very deep, putting *all of old wood under ground*. Plant raspberry tips very shallow, not more than two or three inches deep; mulch a little. Thousands of grape vines and raspberries are lost annually by a violation of these rules.

CULTIVATION—Put no small grain in the orchard for the first five years; use some hoed crop—corn is probably best—leaving plenty of room about trees; cultivate well first part of season, and leave alone after July first. After five or six years, clover is good, the hay cut and left on the ground as mulch. If trees make an annual growth of twelve to eighteen inches it is enough; if less, cultivate or manure the ground; if more, put ground in sod. Prune very little, and that in June. Keep off all noxious insects, rabbits and stock of every kind, and then be of good faith, for fruit will come. If the autumn be dry, mulch trees well with rotted manure, not putting the mulch against the tree.

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## PREFACE.

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In presenting to the public this Descriptive Catalogue, I desire to return thanks for past favors, and to hope that in the future I may receive of the same, such measure as my works deserve. I propose to experiment with all promising novelties in my line of labor, and to hold fast to those that seem good, expecting to make a great many mistakes, and hoping to live long enough to correct some of them.

When the selection of varieties is left to me, customers may rest assured that careful attention will be paid to the special needs of their localities, whether North or South. Unless they have had more than ordinary horticultural experience, they will do best by leaving the selections to those who make such things their special study. When selections are made, I will follow them as nearly as possible. All articles carefully labeled. I shall never knowingly send out an article under a wrong name, but do not claim to be exempt from the liability of all men, *except dead ones*, to err.

TERMS CASH, unless otherwise previously agreed.

# The Orchard.

**SOIL AND SITE**—Choose good, rich soil neither too low nor too high. A gentle slope, just sufficient for drainage—north or west if convenient—is best. Avoid sandy bottoms or knobs and points. If compelled to use high or sandy ground, plant four to six inches deeper than trees stood in Nursery and mulch well each autumn with manure.

**PROTECTION**—A row of trees on the south and west to protect fruit from being blown off by wind, is generally considered advisable. More than that is not advised.

**PLANTING**—If trees fail to succeed when planted, it is considered always in order to abuse the Nurseryman. But remember this, if you plant carelessly you will be the loser, nothing can prevent it, not even abusing the Nurseryman. Plow and pulverize the soil thoroughly. Lay off in rows North and South as wide as you wish and open the rows with the plow as deeply as possible. It saves half the digging. Cut out weak shoots from top altogether and shorten all to correspond with the roots shortened in digging. *Don't forget this.* Plant the heaviest part of the top toward the Southwest and lean the tree a little the same way. Plant carefully, use plenty of water, mulch heavily without delay.

**CULTIVATE** your valuable young trees and shrubs, at least as well as you do your cabbage or corn, till July first, then let weeds grow for winter protection. If your corn takes your attention, and you neglect all these things, your trees will probably dwindle or die. In that case a great deal of satisfaction may be had by laying the blame on the Nurseryman, and buying the next trees of somebody else.

Whoever puts grass in a young Orchard, does one of the things most certain to cause failure. He need not shut his eyes to this fact, his sins will find him out.

## Number of Trees on an Acre at a Given Distance Apart.

|                       |             |                        |           |
|-----------------------|-------------|------------------------|-----------|
| 7 feet apart each way | -----4,840. | 16 feet apart each way | -----170. |
| 4 " " " "             | -----2,722. | 20 " " " "             | -----108. |
| 6 " " " "             | -----1,210. | 16 by 20 " " "         | -----136. |
| 8 " " " "             | -----680.   | 20 " 30 " " "          | -----72.  |

The better plan is to plant Apple trees not more than 16 to 20 feet apart, North and South, that the tops may soon shade the trunks and prevent sun scald. Wider spaces may be allowed East and West, if desired. Wash trunks of Apple trees with very strong soap suds in spring, last of May and last of June. If you find a borer, readily detected on examination by his "*powder post*," cut him out at once, clean out the cavity, trim bark carefully to sound wood and bank up earth over the wound. No one need lose a tree by borers if he does these things.

I aim to propagate largely of such sorts only, as have been found, by actual trial, to endure the winters and bear fruit in Central and Northern Iowa. Most of our Eastern favorites fail here. I have in my Nursery over one hundred sorts, but advise planting the bulk of every Orchard of not more than fifteen to twenty sorts.

**RUSSIAN APPLES**—Of the great number tested the most valuable, so far found, are the Yellow Transparent, Thaler and Longfield, all excellent apples for Central and Southern Iowa. The first two ripen in July, the last in September. Further north their season would be later. As soon as any others of them prove themselves reliable and valuable, they will be extensively cultivated and offered for sale. In the meantime any man who buys "Russian Apples" of strangers at high prices, buys *very uncertain property*. Planters had better wait till the Iowa Horticultural Society has given these things a trial and separated the wheat from the chaff. No valuable winter keepers have, as yet, been found among them.

**SUMMER APPLES.**

*The hardiest and most desirable of each season are placed first on list.*

- ✓ RED ASTRACAN—Medium to large, flattened, beautifully marbled with crimson, covered with heavy bloom, hardy, very popular; July.
- ✓ DUCHESS OF OLDENBURG—Large, beautiful, striped, tart, tree vigorous, immensely hardy, early and most profuse bearer; August. Russian; one of the very best summer cooking apples.
- ✓ YELLOW TRANSPARENT—Medium, yellow, flattened, much like early harvest in appearance and quality. Tree an upright and handsome grower. Seems hardy in Central Iowa, but has blighted badly the past season; July.
- ✓ THALER—Resembles the above very closely in every essential particular; fruit claimed to be larger and to ripen earlier.
- ✓ SOPS OF WINE—Medium, dark red, quality excellent, tree very hardy and productive; August.
- ✓ COLES QUINCE—Large, yellow, ribbed, hardy, productive; August and September.
- ✓ CAROLINA RED JUNE—Small to medium, elongated, deep red, flesh very white, tender, juicy, tree hardy, erect and profuse bearer; July and August.
- ✓ SWEET JUNE—Medium, whitish, excellent tree, very upright, vigorous, hardy, early and abundant bearer.
- ✓ BENONI—Medium, red striped, best of its season, tree hardy, upright, good bearer, blights some; August.

**AUTUMN APPLES.**

- ✓ WEALTHY—New, from Minnesota, medium, round, red, very handsome, excellent, tree very productive, and (among the hardiest of all) most valuable; October to January.
- ✓ HASS OR GROSS POMIER—Medium and above, flattened, striped, beautiful and productive, very upright, hardy North; September, October.
- ✓ UTTERS RED—Medium or above, red striped, very hardy on prairie, productive and of excellent quality, immensely popular where known; September to December.
- ✓ WOLF RIVER—Very large and handsome, deep red or crimson, fine for cooking; (tree has not proven as hardy as was expected) September to October.
- ✓ LONGFIELD—Fruit medium, yellow with red cheek, quality good, tree upright, handsome, an early and abundant bearer. Has not proved as hardy as was expected; August and September.
- ✓ AUTUMN STRAWBERRY—Medium, with bright stripe, juicy, crisp, tree vigorous, productive; September and October.
- ✓ RAMSDELL'S SWEET—Medium, red, excellent, tree vigorous, upright, productive, hardy; October and November.
- ✓ FAMEUSE—Medium, crimson, sometimes striped North, flesh snowy white, very tender, fine and juicy, mild, sub-acid, dessert and cooking, very hardy, productive, popular; October to December.
- ✓ SAXTON—Medium, striped, excellent, tree very handsome, upright; September and October.
- ✓ MAIDEN'S BLUSH—Old and well known favorite, most popular of its season South, not hardy North.
- ✓ RAMBO—Finer flavored than the last, too tender North.
- ✓ STANTON—A valuable variety, origin Polk county, Iowa, has been sparingly propagated in nursery and planted in orchard for nearly twenty years past, where the trees are uniformly sound and healthy in spite of our late destructive seasons and bearing annually heavy crops. The fruit is large, dark red, juicy, tart, with a refreshing vinous quality, good for eating and the very best cooking apple of its season; September to January.

## AUTUMN APPLES.—CONTINUED.

✓ DYER—Tree handsome, round topped, hardy. Fruit medium, roundish; skin smooth, pale yellow; flesh white, very tender and juicy; flavor very mild and agreeable, aromatic, slightly sub-acid, with a suspicion of musk like a ripe pear; quality best for dessert; season September to November, but if wrapped in soft paper and stored in a cool cellar it may be easily kept till January. As a substitute for the pear, which refuses to flourish here, this apple is worthy a choice situation in every orchard in Central and Southern Iowa.

## WINTER APPLES.

✓ WALBRIDGE—A late keeping, medium sized apple, of good quality, tree very handsome; (one of the hardiest North but a shy bearer) December to March.

✓ PEWAUKEE—Seedling of Duchess. Fruit large, roundish, yellow, splashed with dark red, flesh tender, juicy, sub-acid, tree vigorous, hardy and productive; January, April.

✓ GRIMES' GOLDEN—Medium to large, yellow, of the very finest quality, tree hardy, handsome and productive; one of the best for family and market; December to February.

✓ LANSINGBURG—Much like small Romanite but larger, tree hardy and productive, one of the very longest keepers; January to May.

+ SHERIFF—(Am. Beauty of some). In appearance and quality much like Jonathan, early and profuse bearer, very vigorous and hardy; November to February.

✓ BEN DAVIS—Large, striped, handsome, most abundant bearer and most profitable market variety, long keeper; December to May.

✓ WILLOW TWIG—Large, roundish, striped, tart, excellent for cooking and market, tree moderate grower in nursery, becoming fine in orchard; one of the most profitable long keepers, December to May.

✓ MANN—Fruit much like R. I. Greening; keeps till late in spring when it is very valuable for eating and cooking. Tree vigorous and upright, an early and abundant bearer; January to June.

✓ TALMAN SWEET—Medium, pale yellow, good, very hardy, vigorous, productive, most popular winter sweet; December to April.

✓ PARADISE WINTER SWEET—Medium or above, yellow, striped or blushed, most excellent quality, very hardy and vigorous; December to March

✓ IOWA BLUSH—Medium or less in size, finest tart; tree extremely vigorous and hardy, most excellent for the prairie; November to February.

✓ ROMAN STEM—Old, popular sort, medium, yellow, with sometimes red cheeks, vigorous, productive, quality best; November to February.

✓ JONATHAN—Medium, red, beautiful, best quality, tree slender, early and abundant bearer; November to February.

✓ RAWLES JANET—Syn-Janet, Jenniton, Neverfail—well known and most popular western sort, medium, with dull stripes, delicious, hardy, very productive; December to May.

✓ McINTOSH RED—Originated in Canada; very hardy, vigorous and productive; fruit handsome and of good quality; regarded as valuable for the North; November to February.

✓ SALOME—Origin Northern Illinois; very hardy; an *early bearer*, very prolific; size and color much like Janet; juicy and very sprightly; one of the best and *latest keepers*; tree a good grower, limbs shouldered so that they do not break when bending with heavy loads; fruit not blown off by any common winds.

✓ ANNETTE—First planted in Eastern Iowa, in 1866, where the trees are still standing, sound, healthy and fruitful amid the wrecks of other varieties; tree a fine grower, entirely hardy and healthy; fruit of best quality, medium size, dark red, keeps till June.

✓ WINESAP—Medium, red, excellent, productive, profitable, strong, irregular grower, hardy; dessert, cooking and market; December to April.

**CRAB APPLES.**

An assortment of these beautiful and hardy trees should always be one of the first things planted about the new prairie home. Their extreme hardiness and early bearing qualities are appreciated before other fruits are in bearing.

**SIBERIANS**—Large red and large yellow, fine for sauce and preserves, immensely productive, hardy North, very popular.

**MARTHA**—Large, striped, very beautiful, as fine as transcendent. Tree very healthy and fine; early bearer.

**BRIERS SWEET**—Fruit as large as transcendent, pale yellow, splashed with carmine, very sweet and rich, fine for dessert and preserves. Tree vigorous and productive.

**HISLOP**—Almost as large as the early Strawberry apple, deep crimson, deservedly popular for its large size, beauty and hardiness; if gathered early, it may be kept till Christmas.

**WHITNEY'S No. 20**—Large, new, early, beautiful, fine for dessert and cooking; tree hardy, free from blight, immensely productive; a great acquisition.

**TETOFSKI**—A true Russian Crab, very large, whitish, with crimson stripes; juicy, pleasant flavor; early, succeeds and bears well in moist ground.

**SOULARD**—Fruit above medium, yellow, fragrant, best of all for jelly, an abundant, annual bearer, and worthy a place in every garden for jelly alone. But it should be planted for another reason; being descended from our native wild crabs, its iron clad constitution is proof against the wildest freaks of our climate. From descendants of this fruit, crossed with our finer sorts, we may reasonably expect trees and fruit able to endure all changes of our climate and of quality fit for any one. It should be universally planted where crosses with finer sorts are likely to occur, and its seeds saved and planted for the benefit of prairie horticulture.

**NEW CRABS**—Milton, Minnesota, Lake Winter, Alaska, Virginia, etc., etc., can be furnished in limited quantities.

**PEARS.**

The growing of the luscious fruit on exposed prairies, presents many difficulties, but lovers of pears will not give it up yet; choose a dry soil, (clay is best) a sheltered situation, low headed trees, cut back straggling shoots one-half every spring to compel low, dense tops, mulch well winter and summer; a tangle of raspberry bushes is excellent to shade the soil and prevent blight, the greatest enemy. Standard trees are hardier than dwarfs; if dwarfs are planted, they should be set six inches deeper than they grow in nursery, to get the quince stock well below the surface.

**BARTLETT**—Most popular of all, yellow, blushed in sun, rich and buttery, tree erect, early and profuse bearer; August and September.

**SECKEL**—Small, but the best of all in quality; slow, healthy, productive tree; September.

**FLEMISH BEAUTY**—Large, red cheek, beautiful, excellent, tree productive, one of the hardiest, more popular in Iowa than any other.

**BEURRE D'ANJOU**—Large, fine fruit, of excellent quality, one of the most hardy North; October.

**THE RUSSIAN PEAR, BESSEMIANKA**—After four years' trial, this pear has proven healthy, free from blight, and entirely hardy, where all other sorts have suffered more or less severely. The tree is a model of beauty, while the fruit is described as closely resembling the Flemish Beauty in size, appearance and quality. I regard it as by far the most promising of all yet tested, and confidently advise its extended trial. Price for No. 1 trees \$1.00.

Pears should not be allowed to hang on tree till ripe. Early pears should be gathered ten days, and Fall pears two weeks before ripe. The time to gather is as soon as the stem will easily separate from the branch. Never allow trees to overbear; thin out.

**PLUMS.**

The Curculio gives us the only serious difficulty; perhaps the best plan is to plant in a clump and place chicken coops under the trees, from blossoming time till the fruit is nearly matured. The Little Turk is a great coward, and will not stay where plenty of chickens scratch the ground. Planting on stiff clay soil, where pigs run, or where ground is constantly trodden, are all good.

✓ **LOMBARD**—Large, purple, juicy, very fine, one of the best and most profitable of the Eastern sorts,

✓ **MINER**—(Native.) Medium sized, red, firm flesh, excellent for cooking, productive, hardy North.

✓ **WILD GOOSE**—(Native.) Large, bright red, with purplish bloom, rapid grower, early and abundant bearer, not as hardy as Miner.

✓ **WEAVER**—A new, native sort, of good flavor, productive and of extreme hardness North.

✓ **FOREST GARDEN**—Medium, red, fine, very early, hardy, profuse bearer.

✓ **DE SOTO**—Resembles Miner in form and color but two weeks earlier, fine for eating or canning. Tree a moderate grower, bears young and profusely; very promising. Hardy North.

✓ **WOLF**—(Native.) Freestone, vigorous grower, entirely hardy, abundant annual bearer, fruit large, dark red, good quality; extra fine for cooking and canning by reason of being a Freestone.

✓ **MAQUOKETA**—(Native.) Hardy, abundant bearer, fruit bright red, little less in size than the above but the finest in quality for eating of any native yet tested; valuable.

✓ **MARIANNA**—(Native of Texas.) Large, handsome, bright cardinal red, earlier than Wild Goose, profuse bearer; when top worked on Miner seems entirely hardy; very promising for early market.

✓ **ROLLINGSTONE**—A fine red plum from Minnesota, of good quality, perfectly hardy and supposed by some to be a cross between some foreign variety and a native; promising.

Our natives give promise of many new, and very valuable varieties. Most of the Eastern garden sorts are not hardy on the prairies, especially North.

**CHERRIES.**

Here again we are on "hard ground." We may have cherries in abundance, only we must stick to the few varieties of Morello's and Kentish that have proven hardy and fruitful. Men are rapidly learning that the thousands of dollars formally paid annually to eastern men for "extra" sweet cherries, Dukes and Hearts, at fancy prices, had better been sunk in the sea, for the labor and hopes lost with them, were a loss far greater than money. Time will doubtless give us hardy, sweet cherries in the Northwest, but the time is not yet. The Early Richmond is best, others are for succession of fruit.

✓ **EARLY RICHMOND**—Medium, red, early, very fine when fully ripened, tree very hardy, immensely productive, worth nearly all others for the Northwest.

✓ **LATE RICHMOND**—(Kentish.) Much like Early Richmond, but ten days later, hardy and valuable.

✓ **ENGLISH MORELLO**—Large, late, nearly black, slow grower, but very hardy, productive and valuable.

✓ **WRAGG**—A valuable, new, sour cherry, introduced by John Wragg of Wauke, Iowa, and named by the Iowa State Horticultural Society. Supposed to be a seedling of English Morello, as it very much resembles that variety, both in tree and fruit.

✓ **MONTMORENCY ORDINAIRE**—Lately introduced from France, by Messrs. Elwanger & Barry, of Rochester, N. Y., a fine, large, red, acid cherry; larger than Early Richmond, and ten days later, being very prolific and hardy, it is expected to prove very valuable.

I have trees of about twenty sorts of Russian, Polish and German cherries, propagated and grown in my own nursery. They are on trial and as soon as they have shown which are valuable, if any, they will be offered to customers.

Cherry trees budded on mahaleb stocks should be planted deep enough to place the point of union four to six inches below the surface.

## PEACHES.

The common sorts are not at all reliable for the Northwest. Our hopes of future home grown peaches, rest on the chance of securing hardy seedlings from trees grown here. There is no reason to doubt that persistent effort in this direction, will bring the desired result. It is only a question of time.

## QUINCES.

None reliable for the Northwest, money paid Eastern agents for them is thrown away.

## GRAPES.

If the Northwest cannot have peaches and quinces, it can have grapes. The grape is at home in the West, and with our deep soils, bright sun and dry atmosphere, will attain its highest perfection. To grow vines successfully, give them good dry soil; rolling grounds, with a slope both South and North, for succession of fruit, is best. Put the earliest sorts on the South slope, late ones on the North. Plant from six to eight feet apart and plant deeply, not less than eighteen inches filling up the hole gradually, the first season. The old wood should be placed entirely below the surface; more vines fail from shallow planting than from all other causes. *Just before winter, prune, lay down, cover with three or four inches of earth, and take up as late in spring as possible before budding*, to escape late frosts. To learn how to prune, watch an experienced operator half an hour, at work. It will be better than volumes of reading.

**CONCORD**—A very large and handsome grape, very hardy and productive, ripens early, nearly black, sweet and good, the grape for the million.

**WORDEN**—A seedling of the Concord. A handsome, early, black grape which is well described as an Early Concord, valuable as a very early market variety. As healthy, vigorous and productive as its parent; with larger berries and longer bunches, better in quality, a week to ten days earlier, and said to be hardier. Has been well tested in Iowa, and seems to be the very best and most reliable *early* grape for the Northwest. No family vineyard should be without it.

**AGAWAM**—Vine very vigorous and healthy; a strong grower and abundant annual bearer; bunch and berry large and handsome; color a fine dark red; quality very good, vinous and refreshing. As a family table grape is by many regarded as finer than any other sort grown in the West. Vine should always be laid down and covered with earth in winter.

**LADY**—White seedling of Concord. Bunch and berry medium, handsome, pale golden; quality excellent; vine vigorous, hardy and productive. A fine table grape for family use.

**MARTHA**—White seedling of Concord. Bunch and berry medium, greenish white, early, juicy, sweet, good, vine hardy and productive.

**ELVIRA**—A white grape of medium size and good quality, bunches very compact, makes a fine white wine, very hardy and productive.

**POCKLINGTON**—Bunch and berry large, golden yellow, quality good, vine hardy and productive, probably the most reliable and generally satisfactory of all the well known white grapes.

**DELAWARE**—Bunch medium or below, compact, beautiful, purplish red, very sweet, delicious, the best native grape, vine delicate at first, becoming vigorous and productive with age, foliage delicate, is benefitted by summer mulching.

**ROGER'S HYBRIDS**—No. 1, GOETHE, large and showy, amber with red next the sun; No. 3, MASSASOIT, bunch medium, very large, dark red, quality excellent, ripens before Concord; No. 4, WILDER, very large, purple, excellent, early; No. 19, MERRIMACK, very large, black, rather early, by many considered best of all.

These very fine grapes succeed best on thin clay soils, in sheltered situations. Should have winter protection by covering vines with soil.

## NEW GRAPES.

✓ **EMPIRE STATE**—White, tinged with yellow, bunches long and handsome, flavor sweet, rich and sprightly, among the best, keeps well after gathering, worthy of extensive trial as a delicious family grape.

**MOORE'S DIAMOND**—A pure native, a cross between Concord and Iona; a white grape of the highest quality for dessert, said to approach the foreign Chasseleus in flavor, vine healthy, hardy and a prolific bearer, worthy of extensive trial for family use.

Many others are under trial and can be supplied in limited quantities.

## CURRENTS.

Every family should have a good supply of this beautiful and easily grown fruit. Prune out all three year old wood annually after fruiting, leaving more room to the two year wood which gives the fruit. Give good cultivation and plenty of manure, no matter how good the soil; currants love cool, deep soils, and a little shade, succeeding best among fruit trees or along the north side of a fence.

✓ **BLACK NAPLES**—Best black currant, esteemed for jellies and wines for medicinal purposes.

**RED DUTCH**—Old, well known, great bearer and of good quality.

**WHITE DUTCH**—Excellent, productive, not so tart as Red Dutch.

**WHITE GRAPE**—Very large and excellent, the very best table variety.

**CHERRY**—Largest of all, bunches short, vigorous and productive.

**VICTORIA**—Or Houghton Castle—very large, bright red, bunches very long, late, productive and valuable.

**LA VERSAILLAISE**—A French variety, resembling the Cherry, large, of great beauty, and productiveness.

**LONG BUNCH HOLLAND**—New, very promising, valuable for its vigor, productiveness and late keeping qualities.

✓ **FAY'S NEW PROLIFIC**—As large as Cherry, less acid, said to be most productive of all.

## GOOSEBERRIES.

The "Large English gooseberries" prove worthless on the prairies, from mildew, but with our excellent native sorts, we can exist very comfortably without them.

**HOUGHTON**—A vigorous grower, slender, drooping branches, not subject to mildew, fruit medium, pale red, smooth, tender and good.

**DOWNING**—Fruit large, twice as large as Houghton, whitish green flesh, soft, juicy, very good, plant vigorous and prolific; best of all.

**SMITH'S SEEDLING**—Much like above, but of finer quality.

## RASPBERRIES.

To keep a raspberry plantation in good condition, cut out the old wood every spring, and shorten back bearing canes. A good mulching of manure in fall, worked in in the spring, will bring back great returns. To prevent winter killing, bend down canes in Autumn and cover with earth or litter; keep out all suckers with plow and hoe. A heavy mulching at fruiting time, to keep the soil cool, adds greatly to the size and flavor of the fruit.

### CLASS I, UPRIGHT CANES.

✓ **PHILADELPHIA**—Red, hardy, very productive, good for family, profitable for market, very valuable.

**TURNER**—Almost thornless, vigorous, productive, hardy, excellent, long in bearing, red.

✓ **THWACK**—A remarkably fine, large berry; on account of its size, firmness, beauty, productiveness and great hardiness, promises to be one of our standard red sorts.

**CUTHBERT**—Very large and handsome, quality good, ripens a little late and continues a long time in fruit, hardy and productive.

**MARLBORO**—Strong, upright, canes very hardy, an abundant bearer of large, bright crimson fruit, of good quality, promising for market.

**HANSELL**—With us hardy and productive, good size and color, firm and good quality. Our only objection to it is that the canes are not as vigorous and strong as we would like. Ripens as early as any.

## **CLASS II, DROOPING OR BOW CANES.**

This class of Raspberries—rooting at tips—should be planted very shallow. The bud in the cluster of rootlets should be placed upward and only an inch or two below the surface. Pay no attention to the old pieces of cane left on to handle by; thousands of plants are smothered by too deep planting.

**GREGG**—A new black raspberry, larger than Mammoth Cluster, excellent quality, very productive and hardy, a most valuable acquisition.

**SOUHEGAN**—New, early, hardy, immensely productive, most valuable for early market.

**TYLER**—New; said to be quite as early and fine as the last and on some soils even more productive.

**SHAFFER'S COLOSSAL**—Fruit large, purple, soft, with a sprightly sub-acid flavor, very hardy, abundant bearer, highly approved for market.

## **BLACKBERRIES.**

Give good, rich soil, and a little shade, among trees or north of a fence, if possible.

**SNYDER**—Strong grower, very productive, sweet and good, hardiest of all. Has fully proven its value, and should be planted as universally as the Concord grape.

**STONE'S HARDY**—Is claimed to be even harder than Snyder. It is a vigorous grower, berry glossy black and of good flavor; about eight days later than Snyder, and lasts two weeks.

**ANCIENT BRITTON**—Large, productive, sweet; from Wisconsin.

**LUCRETIA DEWBERRY**—A new trailing blackberry, easily protected in winter, a profuse bearer, fruit of the very best quality; should be given a good trial.

## **STRAWBERRIES.**

### **DIRECTIONS FOR GARDEN CULTURE.**

Set the plants in rows three feet apart, and fifteen inches apart in the row. Plant in spring, never in August in this dry climate, give good clean culture, and a light winter protection of litter. The third season spade up the rows of old plants, taking half the ground, leaving the young plants between the rows to occupy the ground. Next season spade up balance of ground, thus renewing the plants every year. Manure ground well, cultivate thoroughly after fruiting. Never fail to give winter protection.

**WILSON'S ALBANY**—Large, dark red, very hardy and productive, most widely known and successful market sort.

**DOWNER'S PROLIFIC**—Fine, vigorous grower, sweeter than Wilson, hardy and very productive, successful market berry for vicinity of Des Moines.

**CHARLES DOWNING**—Large, conical, crimson, firm, of fine flavor, healthy and productive.

**CRESCENT**—(Pistillate). Large, conical, bright scarlet, flesh firm, of fine quality, ripens early and continues a long time in fruit; plant very vigorous and abundantly productive, but must have some staminate sort (as Wilson, Downer, etc.,) planted near it for best results. Probably the best berry for Iowa.

**MANCHESTER**—Plant large, robust, healthy, fruit large, handsome, firm, blossoms pistillate, therefore needs fertilizing like the Crescent, valuable for late market.

**CAPTAIN JACK**—Large, roundish, scarlet, flesh firm and of excellent quality, plant vigorous and *very* prolific,

**SHARPLESS**—Very large, oblong, clear light red, flesh firm, sweet, quality *best*, plant vigorous, hardy and *very* prolific.

**THE JEWELL**—Raised from seed, by P. M. Augur & Son, of Connecticut, claimed to be the most productive large berry ever introduced. Season medium, size large, color bright red changing to crimson when ripe. Flower pistillate; wonderfully productive, being of better color and quality than Sharpless, and at same time very firm. Lacks vigor here and does not make plants enough.

**BUBACH'S No. 5 (P).** We first saw samples of this wonderful large high colored berry at the Nurserymen's Convention in Chicago, in June, 1885, where the vigor of plant and size and beauty of fruit attracted universal attention. Mr. Bubach, the originator, claims it to be the best of all strawberries, as it combines so many excellent qualities, such as great and uniform size, fine form and color, good quality of fruit, unsurpassed productiveness and great vigor of plant. It ripens almost as early as the Crescent, continues about as long in bearing, and is fully as prolific. Leaves large, dark green and endure the hottest sun perfectly. The plants in vigor, early bearing and strong growth, and berries in size and uniform color, exceed the Sharpless.

**THE JESSIE**—Is a variety that originated on the grounds of F. W. Loudon, of Janesville, Wisconsin, some years ago. It has been tested in several states, in different soils, in different climates, and everywhere and always excelled all known sorts in size, quality, productiveness, beauty, and vigor of the plants. The Jessie flourishes in all soils, having been tested in a great many. "Regarding the Jessie strawberry, the Wisconsin State Society examined it on the originator's grounds last June, and were enthusiastic in its praises. The berries lay upon the ground in heaps. They were fair in shape, of good color, averaging very large, one measured nine inches; quarts would measure six to eight inches; flavor very fine. An hour was spent in examining the Jessie strawberries, which were literally piled one above another, around the plants as they grew."

**BIDWELL**—Large, bright crimson, moderately firm, quality good, plant very vigorous and productive; very promising.

**MOUNT VERNON**—A promising new sort, said to be a very strong and healthy grower, producing abundantly of large, showy berries of extra quality, and to be ten days later than Crescent. If it keeps all its promises it will become very popular as a late berry for family and near home market

### HEDGE PLANTS.

ROOT GRAFTS, STOCK, SCIONS AND CUTTINGS, in quantities to suit; prices vary each season, and will be given on application, stating quantity wanted.





In timbered regions, men plant trees and shrubs about their homes for beauty and pleasure. On the prairies men must plant for shelter, also, or they and their families can never fully enjoy that first requisite of home, protection from the elements. No amount of fencing and building will supply the lack of trees, nature's protection for beasts and men.

### EVERGREENS.

Tree of trees for the prairies, sole reminder of summer's greenery, when all nature, else, is swept bare and brown by the storms of winter! Who would not love and cherish them? Who would not enjoy their beauty and their protection? The time is not long, since evergreens "*would not grow on the prairies*," but it is past, and past forever. Experience has rigidly demonstrated, that in Central and Eastern Iowa, several sorts of evergreens may be grown with perfect success, provided only, that certain conditions be observed. In the Northwest more difficulties must be overcome, that is all. Small nursery grown trees, of hardy varieties, transplanted once or more, to give plenty of fibrous roots, and perfectly fresh, are indispensable; the planter has the rest in his own hands. In our dry climate, early spring is the best time for transplanting; if the season be wet, later planting will do, but who can foretell the weather in Iowa? The best plan, when at a distance from the nursery, is to get a quantity of small trees and plant in a mass in rich, deeply plowed ground, with just room between for cultivation and the growth of each tree. When established, these choice specimens may be transplanted to the lawn in early spring, and easily become things of beauty and of shelter for generations to come.

For windbreaks, a single row of Pines or Spruces, eight feet apart or a double row ten feet each way, the two rows "breaking joints" will in a very few years, become a living wall, a better protection from winter blasts than a wall of stone. But half a dozen rows are better than two, and no one who has not tried can imagine the solid comfort added to a prairie home by a generous grove of evergreens on the north and west of it. Riga Pine, Scotch Pine, Austrian Pine, Norway Spruce and White Pine for high screens, and Arbor Vitæ for low ones, are best.

In handling and planting evergreens, never allow the roots to become dry for an instant. Their Juices are resinous, and when once dried, water has no power to restore them; dip the roots in "grout" or very thin mud and plant quickly, cover the roots with fresh soil, and, with a heavy piece of wood, beat the earth solid over them, fill up and pound again, and finish by bringing fresh, loose soil about the tree with a hoe. No wind can now bend the trees about so as to break the tender rootlets as fast as formed. If trees are planted when the soil is very wet, the pounding must be omitted until in working order, to prevent baking; planted in this way, and thoroughly cultivated with plow and hoe every week, evergreens seldom fail to give abundant satisfaction. A heavy mulch July first and they are all right for the season.

Among the most successful for the prairie are:

PINE, SCOTCH—Rapid grower, fine form, extremely hardy, stout shoots, and silver green foliage.

PINE, AUSTRIAN—Remarkably hardy, robust and spreading, leaves long, stiff and dark green, of somewhat slower growth than the last, but more stocky.

- PINE, WHITE—Best American pine, rapid, upright growth, with delicate soft foliage, most graceful of pines.
- SPRUCE, NORWAY—Beautiful, erect tree, very hardy and vigorous, fine for screens or lawns, by many considered handsomest of all.
- SPRUCE, WHITE AMERICAN—A native of our northern forests not of the largest size, fine pyramidal form. Foliage silvery gray and bark light colored; very hardy and valuable; very handsome for lawn specimens.
- FIR, BALSAM—The most popular American evergreen, East, does not endure the prairies as well as the Spruces and Pines, pyramidal form, rich, dark foliage, beautiful where it fully succeeds.
- ARBOR VITÆ, AMERICAN—Beautiful, dwarfish form, fine pyramidal form, flat foliage, best for low screens and sheltered lawns where small growing trees are needed.
- RED CEDAR—Old well known sort, bears clipping in almost any shape.

### NEW AND RARE EVERGREEN TREES.

Our own Rocky Mountains promise to furnish us many beautiful and hardy species hitherto almost untried on the prairies. They have succeeded well in Northern Europe, and on the Western prairies as far as tested. At present they are scarce and more costly.

- PICEA PUNGENS, BLUE SPRUCE OF COLORADO—The most beautiful of all hardy native trees, with fine erect habit and a silvery sheen on its foliage not possessed by any other tree. It is a rare and striking object and worthy a place on any lawn, no matter how beautiful.
- PSEUDO TSUGA DOUGLASII, DOUGLAS' SPRUCE—Also from Colorado. A stately tree, with a peculiarly light feathery foliage of a darker green than the preceding, a rapid, vigorous grower. A stately, elegant, ornamental tree.
- PINUS RIGENSIS, RIGA PINE—From Russia, resembling the Scotch in many respects, but a much more upright and thrifty grower, promises to be immensely valuable for timber and windbreaks on the prairies.

### DECIDUOUS TREES.

#### FOR ORNAMENT, SHADE, TIMBER AND SHELTER.

- ASH, GREEN OR WHITE—Grown from Western seed, it is difficult to distinguish between these sorts, if indeed there are two sorts, but Eastern White Ash seeds do not succeed well here; the Western White or Green Ash is probably the very best timber tree within reach of the prairie farmer; grows about as rapidly as silver maple, perfectly hardy, makes tough, elastic timber, just such as is needed everywhere.
- TILIA, LIME OR LINDEN—A rapid growing, large sized, beautiful, native tree, with very large leaves and fragrant flowers.
- NEGUNDO, ASH LEAVED MAPLE—One of our hardiest, healthiest and cleanest native trees.
- ULMUS AMERICANA, WHITE ELM—A noble spreading and drooping tree of our native forests, peculiarly suitable for avenues and drives.
- KENTUCKY COFFEE TREE—A fine native tree of medium size, upright growth, blunt branches, and feathery foliage turning a golden yellow with frosts.
- BIRCH, AMERICAN WHITE—Very hardy, vigorous and upright, the trunk soon becoming silvery white and very striking, especially among evergreens.
- CATALPA SPECIOSA—Very large leaves, rapid growth, showy flowers in July, perfectly hardy in Central Iowa; the timber is much esteemed for cabinet work.
- CHESTNUT, AMERICAN OR SWEET CHESTNUT—Well known, beautiful tree, valuable for fruit and timber, should be planted only on thin, dry soils, or in sheltered situations, fails on exposed prairies.

**RUSSIAN MULBERRY**—This very hardy and vigorous tree was at first recommended for timber and for fruit. It is worthless for those purposes but seems to be the best thing for a quick growing windbreak and *snow-break* yet discovered.

**LARCH, EUROPEAN**—Most elegant lawn tree, hardy, rapid grower, valuable for timber if allowed age, must be planted very early in spring.

**MOUNTAIN ASH**—Very hardy, handsome, with fine clusters of scarlet berries hanging on the trees in winter, a beautiful tree for the lawn.

Many others can be furnished in limited quantities.

### WEeping TREES.

**MOUNTAIN ASH, EUROPEAN WEEPING**—A strong grower, remarkably pendant, perfectly hardy, succeeds admirably on the prairie.

**BIRCH, EUROPEAN WHITE WEEPING**—A graceful tree of moderate size, with silvery bark and slender branches, erect when young, but assuming an elegant drooping habit after a few years growth.

**BIRCH, CUT LEAVED WEEPING**—Erect, stately, rapid, hardy, with long slender pendant branches, delicately cut leaves and silvery white trunk, especially fine when near evergreens, the most elegant weeping tree on the list.

**WILLOW, WISCONSIN WEEPING**—Hardy, native sort, upright at first, but soon assuming a fine drooping habit, very reliable.

**WILLOW, KILMARNOCK WEEPING**—One of the very finest weepers, but the stock upon which it is usually budded, is not perfectly hardy in exposed situations.

### ORNAMENTAL SHRUBS.

**AMERICAN STRAWBERRY TREE, EUONYMUS**—A beautiful native shrub or small tree growing six to ten feet high, with a spreading, graceful habit, handsome foliage in early summer, becoming loaded with the peculiar seed pods from which it derives its name, Strawberry tree. In Autumn and Winter one might well imagine it to be a tree loaded with scarlet strawberries. Being a native it is entirely hardy and reliable; as a specimen on a lawn backed by evergreens, it is one of the most pleasing and graceful of objects, at any season; only needs to be known to be much sought and highly prized.

**ACACIA ROSE, OR MOSS LOCUST**—Spreading, mossy, irregular, with beautiful clusters of rose colored flowers in July, hardy here.

**ALMOND, DWARF, DOUBLE FLOWERING**—Flowers like small roses, very double, early, profuse, deep rose color at first, very hardy and desirable.

**AMORPHA, FRUTICOSA**—A fine native shrub, with spikes of dark purple, flowers in June.

**BERBERRY, PURPLE**—Leaves, flowers and fruit purple, hardy, makes a beautiful clump; will be extensively planted when better known.

**CALYCANTHUS**—Sweet scented shrub, wood and flowers deliciously fragrant, very desirable, but needs winter protection here.

**CORNUS SANGUINEA, RED BRANCHED DOGWOOD**—A handsome, hardy shrub, with white flowers. Especially handsome in winter, by contrast of its blood red bark with the snow.

**CURRENT, Mo., FRAGRANT**—Profuse bloomer, early, flowers bright yellow, fragrant, hardy north.

**DEUTZIA, FLOR PLENO**—Flowers double, white, tinged with rose, one of the finest shrubs in cultivation, but needs winter protection here.

**DEUTZIA SCABRA**—Gives a profusion of beautiful white flowers in June, single.

**HONEYSUCKLE**—Upright or tree, most beautiful shrub, perfectly hardy, with a profusion of delicate pink flowers, early.

**HYDRANGEA, GRANDIFLORA**—One of the most desirable shrubs, flowers white, in great panicles a foot long, in August and September, when blossoms are scarce. Perfectly hardy here.

- LILAC, PURPLE, WHITE AND PERSIAN—All highly esteemed for perfect hardiness, early and fragrant bloom; common, but indispensable.
- PURPLE FRINGE, MIST OR SMOKE TREE—Nearly covered with singular purple, fringe-like flowers, in July; very ornamental.
- PRUNUS TRILOBATA, FROM CHINA—Flowers double, delicate pink, an inch in diameter, thickly set on long slender branches, in May.
- QUINCE, JAPAN SCARLET—Profuse bloomer, scarlet flowers, in long succession, one of the finest hardy shrubs.
- SNOWBALL, GUELDER ROSE—Well known, perfectly hardy, repays the least of care with magnificent clusters of pure white flowers.
- SPIRÆAS—Decidedly the best and hardiest family of shrubs for the Northwest. Many beautiful varieties of different colors and times of flowering, from May to September; of easiest culture, should be planted everywhere.
- S. ROSEA SUPERBA—Its broad cymes of bright pink blossoms, and the purplish tinge of the young growth, make it truly a superb plant.
- S. CALLOSA ROSEA—Much like the preceding, but of a pretty dwarfish habit.
- S. BILLARDI—Handsome spikes of rose colored flowers for many weeks in succession.
- S. DOUGLASII AND SEMPER FLORENS—Same colored flowers as the last, but each with beauties of its own.
- S. OPULIFOLIA—A handsome vigorous shrub, with white flowers, followed with broad cymes of reddish berries, hanging on till winter. Worthy of general attention.
- S. PRUNIFOLIA FLORE PLENO—Double flowering, plum leaved spirea, from Japan, with pure white flowers like daisies, in May.
- S. CALLOSA ALBA—A beautiful dwarf variety, with large cymes of white flowers from June to September; very desirable.
- S. SALICIFOLIA AND SORBIFOLIA—Large shrubs with spikes of white flowers; vigorous and hardy.
- SYMPHORICARPUS, WAXBERRY—Well known old favorite in the East; pink flowers and large, white, wax like berries that hang on into winter.
- SYRINGA, OR MOCK ORANGE—Beautiful, tall, vigorous, hardy, with profuse, white, orange like flowers in May; very popular.
- VIBURNUM, LANTANOIDES—Tall, hardy, with soft, downy foliage, and showy clusters of white flowers in May.
- VIBURNUM, OPULUS—Tree cranberry, resembles the snowball in wood and foliage, while its acid fruit is highly esteemed.
- WEIGELIA, DIERVILLA—A beautiful family of shrubs, lately introduced from Japan and China, many varieties, some of which are not hardy here.
- W. ROSEA—Hardy, with profuse, rosy, trumpet shaped flower, in May, the most superb shrub of the season.
- W. AMABILIS—Lovely Weigelia, fine grower, large foliage and flowers, blooms freely in autumn, needs some protection in winter.

### VINES AND CREEPERS.

- AMPELOPSIS, VIRGINIA CREEPER—Native, one of the most vigorous and hardy climbers, foliage becomes rich crimson in autumn; best climber for exposed situations.
- AMPELOPSIS VEITCHII, JAPAN CREEPER—Leaves smaller than the native but abundant, forming a dense sheet of green, changing to scarlet in autumn. For clinging to brick or stone work, no other plant equals it; requires good care and protection till well established, will succeed best in partial shade.
- CELASTRUS SCANDENS—A fine, native climber, with shining green leaves, yellow flowers and orange colored fruit, hanging on all winter. A hardy, woody vine, worthy of extensive planting.
- BIGNONIA, TECOMA—TRUMPET FLOWER—Foliage handsome, flowers large, scarlet, trumpet shaped, in August, hardy and fine.

- CLEMATIS, VIRGIN'S BOWER—A class of elegant, slender-branched climbers, with handsome foliage, and abundant flowers of various colors
- C. VIRGINIANA—Rapid grower, hardy, profusion of white flowers in August.
- C. FLAMMULA—Flowers white, small, very fragrant.
- C. VITACELLA—Blue flowers.
- C. JACKMANII—Large, intense violet purple, of velvety richness; a great acquisition.
- HONEYSUCKLE, SCARLET TRUMPET—Or monthly, very vigorous, hardy, blooming all summer.
- HONEYSUCKLE, YELLOW TRUMPET—Differs from the last in color of blossom.
- HONEYSUCKLE, MONTHLY FRAGRANT—Blooms all summer, very fragrant, buff pink.
- WISTARIA SINENSIS, CHINESE WISTARIA—One of the most elegant and rapid growing of all climbers, growing fifteen to twenty feet in a season, has long, pendulous clusters of pale blue flowers, spring and autumn; very hardy.
- WISTARIA, CHINESE WHITE—With white instead of blue flowers.



By common consent, the rose has long ruled as Queen among flowers; none gives better satisfaction, when well treated. Feeble, sod bound plants cannot give plenty of fine bloom, for something cannot come of nothing. If planted on lawns, and in no situation can they be more charming, a liberal circle should be spaded and manured, annually, and kept free from weeds. All but the hardest winter, better if bent down in autumn and covered with litter.

## DIVISION I.

### I, SUMMER ROSES.

All hardy and of easy cultivation. These old favorites would well repay more attention than they receive.

CENTIFOLIA, OLD HUNDRED LEAF ROSE—Rose color, large, globular, very fragrant, a superb old sort.

PAUL RICAUT—Bright crimson, a beautiful, globular rose.

VICTOR TRACY—Deep red, large and fine, vigorous and hardy.

CAROLINE MIGNONNE—Bright scarlet, perfect form, very fragrant.

AURETTI—Dark crimson, fragrant.

DOUBLE SWEET BRIAR—Old, well known favorite, vigorous and fine.

GEORGE THE FOURTH—Dark, velvety crimson, very free bloomer.

HARRISON'S YELLOW—Fine, bright yellow, early, robust and perfectly hardy.

MADAM PLANTIER—Pure white, free bloomer, the very best white rose we know, should have some winter protection. Best sort for cemetery.

SULTANA—Light blush, very free bloomer, perfectly hardy here, very desirable.

### II, MOSS ROSES.

The moss roses are strong growers, and perfectly hardy; they remain in bloom a long time, and are especially prized for their beautiful mossy buds.

BLUSH MOSS—Very mossy, free bloomer, fine buds, great favorite.

COUNTESS DE MURINAIS—The finest, double white moss rose, large, beautifully mossed.

HENRY MARTIN—Fine, rosy carmine.

CRESTED MOSS—Deep rose colored buds, surrounded with mossy fringe.

CAPTAIN INGRAM—Dark velvety purple, foliage small, dark color.

### III, CLIMBING ROSES.

QUEEN OF THE PRAIRIE—Bright rose, in clusters, vigorous, very free bloomer, by far the best climber we know.

BALTIMORE BELLE—Light blush, in clusters, strong grower, needs good winter protection.

GREVILLE, OR SEVEN SISTERS—Fine, free bloomer.

PRIDE OF WASHINGTON—Brilliant, dark rose, fine form, very large clusters.

### DIVISION II.—PERPETUAL ROSES.

#### I, HYBRID PERPETUALS.

These are Hybrids or crosses between June and Monthly roses, partaking of the hardiness of one parent, and the perpetual blooming habits of the other. They are by far the most popular family of roses, needing good soil and culture, as they can only bloom on new shoots of the current season; cutting off the seed pods and freely manuring, after the first crop, will ensure better blooms later in the season. All are benefitted in our severe climate by a light winter protection. The varieties are numbered by hundreds and thousands; only a few can be described here.

BARONNE PREVOST—Large, rosy blush, fine.

CHARLES LEFEBVRE—Reddish crimson, very velvety and rich, but fading soon, large, full, beautifully formed.

COQUETTE DES ALPES—White, shaded with carmine.

EUGENE VERDIER—Crimson purple, large and full.

GENERAL JACQUEMINOT—Rich, velvety scarlet, changing to purplish; a fine grower and free bloomer.

CAROLINE DE SANSAL—Clear, brilliant rose, very large and sweet, a first-class rose.

GENERAL WASHINGTON—Brilliant crimson, very large and double, one of the best.

LA FRANCE—Delicate, silvery rose, very large and full, very fragrant, fine in autumn.

LA REINE—Satin rose, large and full, fragrant.

COUNT BISMARCK—Rich, dark, purplish scarlet, fine form and free bloomer.

MADAM CHARLES WOOD—Dazzling crimson, large size, free bloomer, a magnificent rose.

BARONNE DE BONSTETTIN—A strong, vigorous grower, large, very dark red, almost black, splendid.

#### II, MONTHLY ROSES.

AGRIPPINA—Brilliant, fiery red, full and sweet, an early and profuse bloomer.

BOUGERE—Deep, rosy bronze, a superb rose, large, full and very fragrant.

BELLA—Pure white, tea scented, large buds.

BON SILENE—Noted for its very beautiful buds, deep rose color, very sweet and fine.

HERMOSA—Clear rose, very double, constant bloomer, one of the best.

ISABELLA SPRUNT—Canary yellow, beautiful buds, very sweet, profuse bloomer.

MADAM MARGOTTIN—Beautiful, dark citron yellow, center rosy blush, a good rose.

SAFRANO—Bright apricot, changing to salmon fawn, beautiful orange buds.

**HARDY FLOWERING PLANTS.**

**DIELYTRA SPECTABILIS**, or **BLEEDING HEART**—Well known favorite, perfectly hardy, of easiest cultivation, early and abundant bloomer.

**PÆONIAS**—Many varieties and colors, white, rose, crimson and variegated, perfectly hardy, no home should be without them.

**P. WHITLEGH**—Large, white, yellow center.

**P. ROSE FRAGRANS**—Violet Rose, very sweet, fine bloomer.

**P. HUMEL**—Purplish rose, very full and double, immense size.

**P. FESTIVA**—White carmine center, full, beautiful and sweet.

**P. LOUIS VAN HOUTTE**—Dark crimson, very full and compact. And many others.

**YUCCA FILAMENTOSA**, **ADAM'S NEEDLE**—Thread leaved, creamy white, stem three to four feet high, covered with bell shaped flowers, on laterals forming a pyramid, very striking.

**BULBS AND ROOTS.**

**DAHLIAS**—Showy and beautiful plants, of easy cultivation; many sorts, must be planted in the spring.

**TULIPS**—These truly magnificent flowers deserve all admiration; many varieties; they should be planted in autumn, six inches deep, in good rich soil, and well covered with mulch through the winter; *very early*.

**HYACINTHS**—One of the best bulbs for winter blooming, in pots or glass.

**LILIES**—A beautiful tribe, may be moved in spring, as well as in autumn, many varieties, Yellow, Tiger, White, Fragrant, etc.

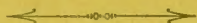
The Japanese varieties are finest of all, but require special care to insure success.

**LILY OF THE VALLEY**—Large leaves, flowers small, bell shaped, in racemes and deliciously fragrant.

**PHLOXES, PERENNIAL**—Fine, hardy perennials, of easiest culture, long in bloom, and of almost every variety of bright colors.



## Counsel to Planters.



Good judgment and courage are needed now. We have passed through a period of destruction and discouragement, such as has not been known since 1856, almost a third of a century. It is as likely as not that a quarter century may pass before such destruction of orchards shall come again, if it ever does. This people must have apples. Families cannot be healthfully reared without abundance of fruit. Good apples are worth more trouble than they cost us, and we must have them. But how? Some would have us plant Russians. Very well! Plant them! But remember that every Russian so far fruited in Central and Southern Iowa ripens and drops its fruit early. Not one has given any proof of value for winter. Our old friends that have been so sadly damaged or killed by the past severe seasons, are all we have left to depend upon for *winter apples*. We must plant them still. There is absolutely no other hopeful course. If we top work them on hardy stocks like Duchess or Whitney's Hybrid or any other equally good, it makes success much more certain, and is the very best we can do until new and hardy seedlings have been grown and tested.

The Iowa Horticultural Society has twenty-two experiment stations located in the various parts of the State, each one in charge of an experienced Horticulturist. All new fruits, vines and trees that have sufficient promise are purchased by a committee of the most experienced men in the Society and distributed to these stations for trial. The results, favorable or unfavorable will be printed in the annual reports of the Society and the newspapers. These experiments will save tens of thousands to the farmers of the State by sifting the good from the bad and letting planters have the benefit without trying these experiments for themselves. Therefore, if some stranger offers some new and unknown fruit or tree at a very high price do not give him much money for experiments, but deal with reliable home nurserymen who have such things as the Horticultural Society has tested and found worthy. Trees said to be budded on French crab stocks are a fraud and will not succeed if really what they pretend to be, for the stock is not hardy. Do not buy new fruits from the East at high prices. After they have been tested and pronounced reliable by the Horticultural Society there will be plenty of time to buy. The same is true of Russians or any other fruits, trees or plants from a distance. Spend your money with known and reliable men and no others. Take good care of what you buy, and trust in Iowa soil for your reward.

